

Amendments to the Claims:

1. (Presently amended) An isolated and substantially purified DNA sequence comprising ~~a sequence selected from the group consisting of SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:3~~ containing at least one variation selected from the group consisting of:

a T at nucleotide base number 4121 of SEQ ID NO:3;

a C at nucleotide base number 4621 of SEQ ID NO:3;

a T at nucleotide base number 4970 of SEQ ID NO:3;

a C at nucleotide base number 11056 of SEQ ID NO:3; and

a T at nucleotide base number 12145 of SEQ ID NO:3,

and or contiguous portions thereof.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Presently amended) A hybridization probe comprising the ~~polynucleotide of claim 4~~ DNA sequence of claim 1 and a detectable label.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Presently amended) An expression system comprising a DNA sequence that corresponds to SEQ ID NO: 3, wherein said expression system comprises a recombinant host cell transformed or transfected with said DNA sequence.

19. (Cancelled)

20. (Presently amended) The expression system of ~~claim 19~~ claim 18, wherein said DNA sequence includes one or more of the variations selected from the group consisting of:

a T at nucleotide base number 4121 of SEQ ID NO:3;

~~an A at nucleotide base number 4123 of SEQ ID NO:3;~~

~~a C at nucleotide base number 4368 of SEQ ID NO:3;~~

a C at nucleotide base number 4621 of SEQ ID NO:3;

~~a T at nucleotide base number 4790 of SEQ ID NO:3;~~

~~a T at nucleotide base number 4816 of SEQ ID NO:3;~~

a T at nucleotide base number 4970 of SEQ ID NO:3;

~~a G at nucleotide base number 5055 of SEQ ID NO:3;~~

~~an A at nucleotide base number 5295 of SEQ ID NO:3;~~

~~an A at nucleotide base number 5695 of SEQ ID NO:3;~~

~~a T at nucleotide base number 7375 of SEQ ID NO:3;~~

~~an A at nucleotide base number 7759 of SEQ ID NO:3;~~
~~an A at nucleotide base number 8596 of SEQ ID NO:3;~~
~~base numbers 9603-9609 of SEQ ID NO:3 are absent;~~
~~an A at nucleotide base number 9892 of SEQ ID NO:3;~~
~~an A at nucleotide base number 9963 of SEQ ID NO:3;~~
~~an A at nucleotide base number 10132 of SEQ ID NO:3;~~
a C at nucleotide base number 11056 of SEQ ID NO:3; and
~~a T at nucleotide base number 11091 of SEQ ID NO:3;~~
~~an A at nucleotide base number 11106 of SEQ ID NO:3;~~
~~a T at nucleotide base number 11774 of SEQ ID NO:3;~~
~~an A at nucleotide base number 12143 of SEQ ID NO:3;~~
a T at nucleotide base number 12145 of SEQ ID NO:3, or contiguous
portions thereof;
~~a G at nucleotide base number 14367 of SEQ ID NO:3;~~
~~base number 17028 of SEQ ID NO:3 is absent; and~~
~~a T at nucleotide base number 17630 of SEQ ID NO:3.~~

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

44. (Cancelled)

45. (Cancelled)

46. (Newly presented) A DNA sequence that is
complementary to the DNA sequence of Claim 1.